

# Oral Health and Overall Health



# DENTAL PROBLEMS

- More than 60% of US military recruits were not immediately deployable

Bipartisan Policy Center. Case Study: US Dept. of Defense Initiatives 2012

- 20 million lost work days

Principal Financial Group

- 12 million days of restricted activity

Principal Financial Group

- 51 million school hours are lost each year

Measuring Oral Health and Quality of Life (pp. 25-46) Chapel Hill, NC: Dept. of Dental Ecology, Univ. of N.C.

- 64% of adults 65 and older have moderate to severe gum disease

- 50% of all people over 18 have some stage of gum disease

Glenn Ellis, Information is the Best Medicine

# Cavities vs. Gum Disease

There are over 500 bacteria in our mouths, some good and some not so good.

Certain bacteria are responsible for us getting cavities and other types of bacteria are responsible for gum disease.

You can be cavity free and still lose your teeth to gum disease.

If cavities are left untreated, the decay can become so severe that you lose the tooth.

Abscessed teeth have led to loss of life.

Tooth loss, for whatever reason, can affect your quality of life. Chronic pain may be present, eating could become difficult, employment and social embarrassment might come into play.

**DIABETES**

**ALZHEIMERS**

**STROKE**

**H. PYLORI**

**HEART DISEASE**

**PNEUMONIA**

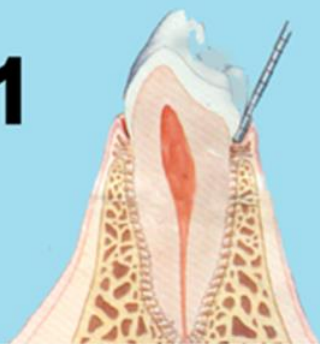
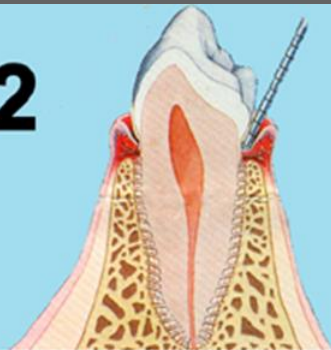
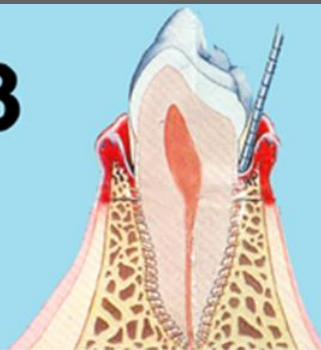
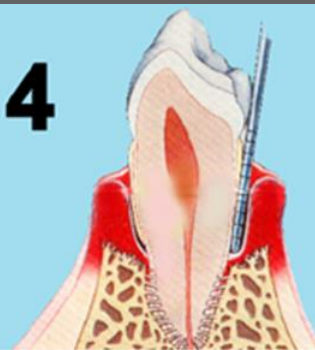
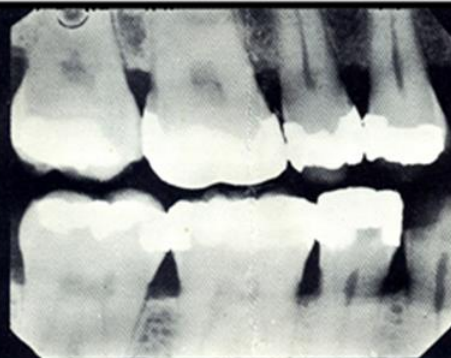
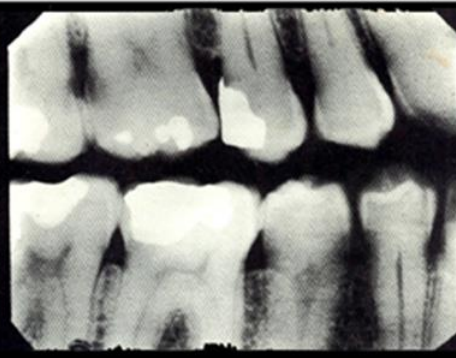
**ADVERSE PREGNANCY OUTCOMES**

**OSTEOPOROSIS**

**RHEUMATOID ARTHRITIS**

**CANCER**



**1****2****3****4****5****Healthy Teeth & Gums****Gingivitis****Early Periodontitis****Moderate Periodontitis****Advanced Periodontitis**

# DIABETES

- 95% of people with diabetes have some form of gum disease  
[www.adha.org/media/facts/total\\_health.htm](http://www.adha.org/media/facts/total_health.htm)
- People with diabetes and gum disease are 3 X's more likely to have heart attacks
- Successfully treating gum disease in a person with diabetes can result in a 10-20% improvement in glycemic control  
J Am Dent Assoc  
2006; 137:26-31





# STROKE

- You are twice as likely to suffer a stroke when having gum disease as opposed to diabetes

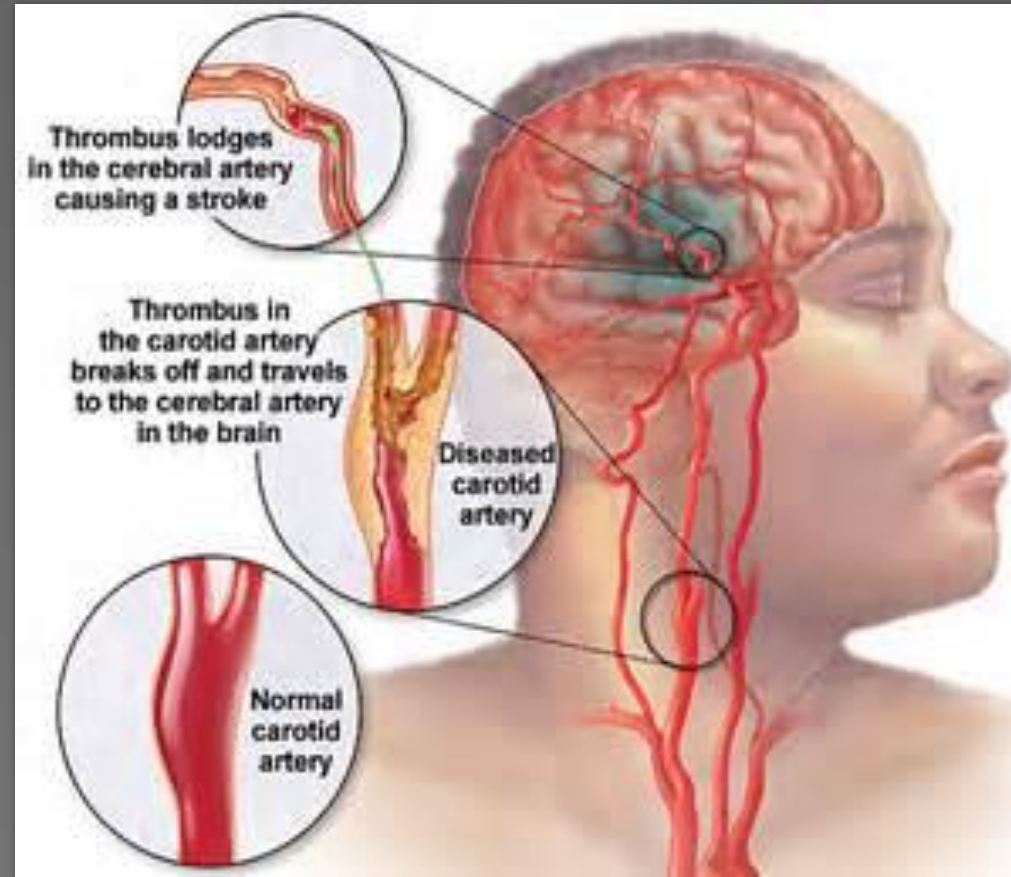
British Dental Health Foundation

- 40% of the bacteria lodged in carotid arteries of stroke sufferer's come from the mouth

Glenn Ellis, Health Educator

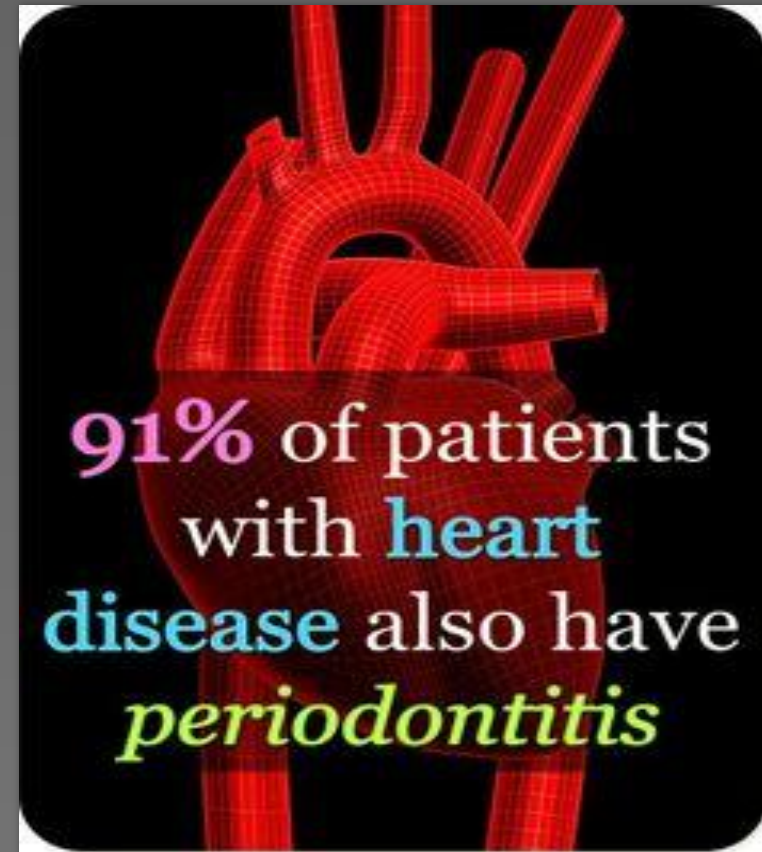
- Having gum disease increases likelihood of having a stroke by 3 x's

[www.vhcf.org/data/statistics-and-research-on-dental-access/](http://www.vhcf.org/data/statistics-and-research-on-dental-access/)



# HEART DISEASE

- People with gum disease are twice as likely to have CAD  
[www.perio.org/consumer/mbc.heart.htm](http://www.perio.org/consumer/mbc.heart.htm)
- International Journal of Cardiology (March 1, 2013) authors concluded: "...the risk of arterial fibrillation can be reduced by dental scaling."
- Oral bacteria combines with platelets resulting in thrombosis
- Over 84% of patients with CAD had gum disease  
[www.perio.org/consumer/mbc.heart.htm](http://www.perio.org/consumer/mbc.heart.htm)





# PREGNANCY

- Expectant mothers with gum disease are 7 x's more likely to have a premature birth

(inflammation triggers production of prostaglandin)  
[www.vrp.com/heart-health/oral-health-and-heart-disease-the-unexpected-connection](http://www.vrp.com/heart-health/oral-health-and-heart-disease-the-unexpected-connection)

- A study in Klamath Co., Oregon, encouraging low-income pregnant women to utilize dental care, showed that the children of these mothers were about one-and-a-half times more likely to be cavity-free than children in comparable counties.

Milgram et al.  
Children's tooth decay in a public health program to encourage low-income pregnant women to utilize dental care BMC Public Health 2010 10:76



# CANCER



- Gum disease increases the risk of head and neck cancer.
- Bacteria responsible for gum disease has been found in colon cancer tumors.  
Case Western Reserve University of Dental Medicine
- Gum disease increases pancreatic and kidney cancer risk by 62%. Harvard
- Study of African Americans with normal kidney function: those with severe gum disease developed kidney disease at 4x's the rate of those without. University of California, San Francisco; Vanessa Grubbs, MD

# PNEUMONIA

- Number of patients who developed pneumonia was 4 x's higher in those with gum disease. Margarita Ochoa-Maya, MD, CDE, CCD
- Wearing dirty dentures increases the chances of pneumonia by 50%.
- Silent aspiration





# TREATING GUM DISEASE

## Hospitalization Reductions:

Stroke	21.2%
Heart Disease	28.6%
Diabetes	39.4%

Am J Prev Med 2014; 47(2):

## Healthcare Costs Reduced:

Pregnant women	74%
Diabetics	40.2%
Cerebral Vascular Disease	40.9%
CAD	10.7%

Am J Prev Med (June 18, 2014)



## Smile Smart for Your Health

Those eligible for additional benefits through Delta Dental of South Dakota's Smile Smart Program include:

- People with periodontal (gum) disease.
- People with diabetes.
- Pregnant women.
- People with high-risk cardiac conditions.
- People with kidney failure or who are undergoing dialysis.
- People undergoing cancer-related chemotherapy and/or radiation.
- People with suppressed immune systems due to organ transplant, stem cell (bone marrow) transplants or those with HIV positive status.
- People at risk for oral cancer.

Delta Dental of South Dakota's Smile Smart for Your Health enhanced benefits program integrates medical and dental care - customizing benefits at the individual level by offering services to people with specific health conditions that can be positively affected by additional oral health care. Delta Dental enrollees with diabetes, pregnancy, periodontal disease, high-risk cardiac conditions, kidney failure/dialysis, suppressed immune systems or cancer-related chemotherapy and/or radiation all qualify for additional services. The program also includes benefits to aid in the fight against oral cancer.

### Benefits for People with Periodontal (Gum) Disease

For enrollees with periodontal disease or periodontal surgery, periodontal maintenance needs to be conducted more frequently than the traditional two cleanings per year. The additional cleanings are more economical than periodontal surgery, and they help maintain overall health and reduce tooth loss compared to periodontal patients who do not receive these therapies. Enrollees with periodontal disease are eligible for four teeth cleanings, either prophylaxis (general cleaning) or periodontal maintenance, in a benefit year.

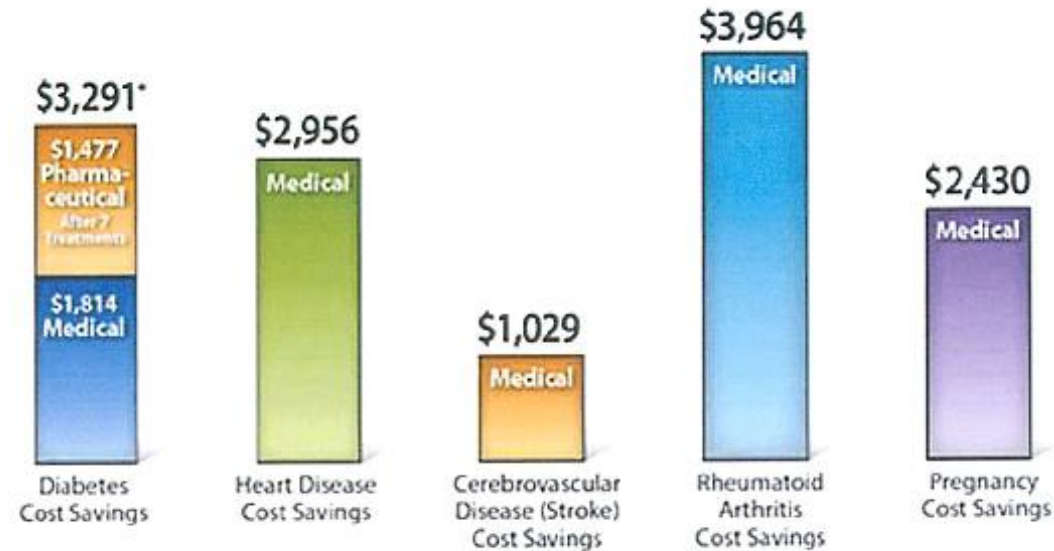
### Benefits for People with Diabetes

The relationship between diabetes and oral health, specifically periodontal disease, is recognized by both the medical and dental communities. Research has confirmed that diabetes worsens with periodontal disease, and it strongly suggests that severe periodontal disease increases the severity of diabetes. A number of studies show that when diabetics receive professional teeth cleanings, their blood glucose levels are much better controlled. Enrollees with diabetes are eligible for four teeth cleanings, either prophylaxis (general cleaning) or periodontal maintenance, in a benefit year.

### Benefits for Pregnant Women

Scientific evidence indicates that women with periodontal disease may be more likely to give birth to premature babies. Some studies have shown that a significant percentage of the 250,000 premature, low birth weight infants born in the United States each year may be attributed to infectious oral disease. Clinical studies of pregnant women with periodontal disease suggest that more frequent professional teeth cleanings may benefit the health of both baby and mother. Pregnant enrollees are eligible for one additional prophylaxis (general cleaning) or periodontal maintenance visit during the time of the pregnancy.

## Treating Gum Disease Equals Annual Cost Savings



United Concordia's landmark Oral Health Study shows that annual cost savings of \$3,291, \$2,956, \$1,029, \$3,964 and \$2,430 are possible when individuals with diabetes, heart disease, cerebrovascular disease (stroke), rheumatoid arthritis and pregnancy are treated for gum disease.

\*3-year average of \$1,814 in savings from reduced hospital and office visits begins in the first year of periodontal treatment. Pharmacy savings realized annually after patient receives at least 7 periodontal treatment and/or maintenance visits.

UNITED CONCORDIA<sup>®</sup> DENTAL



Family Medicine and Community Health





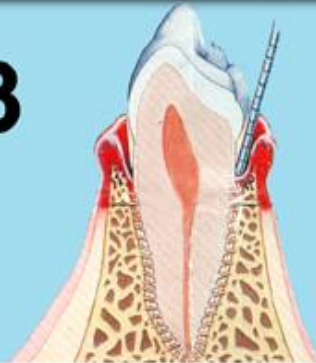
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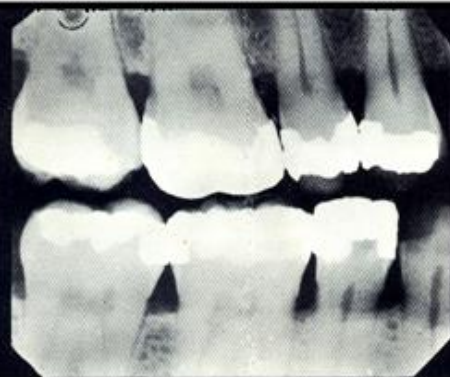
**Healthy Teeth & Gums**

**Gingivitis**

**Early Periodontitis**

**Moderate Periodontitis**

**Advanced Periodontitis**



# How to discuss treating gum disease:

- Referral to a general dentist first step
- Documentation of existing gum disease necessary (x-rays and pocket measurements)
- Depending on the severity of disease, treatment will occur locally or the dentist will refer to a specialist (Periodontist). Currently there is 1 Periodontist that takes Medicaid
- Once treatment is completed, cleaning appointments will need to be scheduled every 3 months
- When treating gum disease the mouth is numb
- If all areas of the mouth are diseased, typically half of the oral cavity is treated at one time
- Keep in mind, the mouth is the fastest healing part of our body
- Whether formal treatment is completed or not, ANY reduction in the mouth's bacterial load is beneficial

# Medicaid and Treating Gum Disease

❖ D4341 perio scaling/root planing  
(4 teeth or more) \$153.01

❖ D4342 perio scaling/root planing  
(1-3 teeth) \$76.91

❖ D4355 Full Mouth Debridement  
\$85.74

❖ D4910 Perio Maintenance \$66.79

Medicaid reimbursement  
rates





# MOUTH WASH

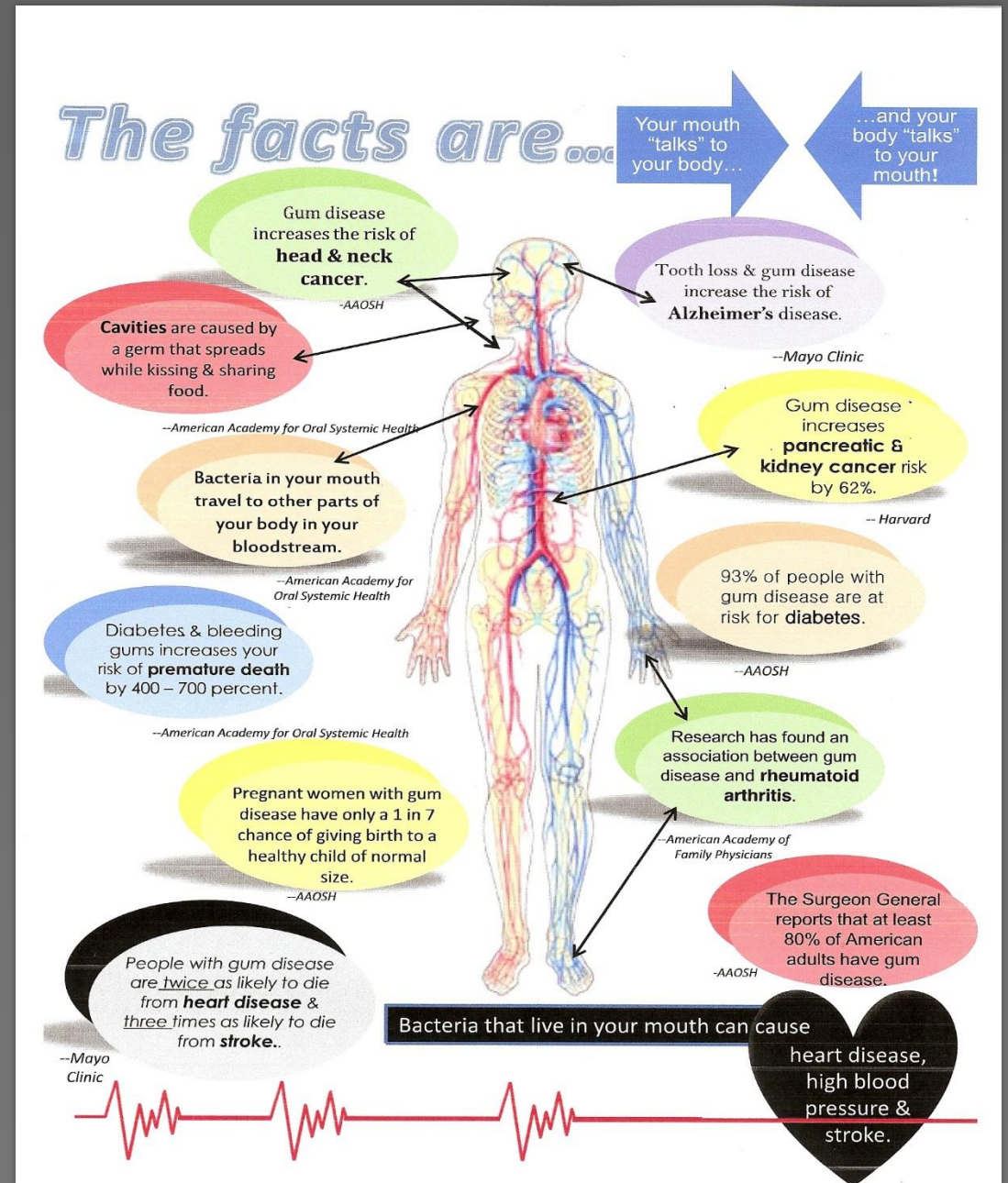


Antibacterial: contains chlorhexidine and is prescription only

Antiseptic: over-the-counter, most contain alcohol which can dry the oral tissues



It's time for us not to think of our mouths as somehow disconnected from the rest of our body. The same blood flows through them, the same nerves go to them. To have a healthy body, you need a healthy mouth.





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